



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,357	09/25/2003	Aziz Hassan	BSN5DIV	6637

7590 09/19/2007  
Thomas L. Adams  
P.O. Box 340  
120 Eagle Rock Avenue  
East Hanover, NJ 07936

EXAMINER

CAMERON, ERMA C

ART UNIT	PAPER NUMBER
----------	--------------

1762

MAIL DATE	DELIVERY MODE
-----------	---------------

09/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/669,357  
Filing Date: September 25, 2003  
Appellant(s): HASSAN ET AL.

**MAILED**  
**SEP 19 2007**  
**GROUP 1700**

Benjamin Appelbaum  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 7/31/2007 appealing from the Office action mailed 8/3/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct, with the exception that claim 43 is canceled, not rejected (claim 43 is disclosed as being both rejected and canceled).

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

The examiner notes that the summary contains subject matter not in the claims, for instance a comparison of waxes in Table A on page 7, a statement that "the triglyceride does not

Art Unit: 1762

contain 100% by weight of any one particular fatty acid” (8:6), or the respective melting points of palm and soybean triglycerides (9:6-9).

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant’s statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,001,286	Sleeter	12-1999
WO96/00815	Ong et al	1-1996
Eriksen, J. RD 392017, 12-1996		

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

- a) Claims 30-39, 41-42, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sleeter (6011286).

Art Unit: 1762

'286 teaches enhancing water resistance of materials such as fiberboard (1:54-67) or other fibrous vegetable materials (see Abstract) with a composition of low iodine value (preferably 0-30, 1:40-52) triglyceride fats from plant or animal sources (2:21-46), such as a soy stearine (see Example 1) or a palm triglyceride (1:49, Example 1).

The triglyceride is applied as a powder, an emulsion or a dispersion (see Abstract).

'286 does not disclose the MP or saponification value of the triglyceride, but because stearine is one of the triglycerides claimed by applicant, the stearine of '286 would inherently have the same MP and saponification value as that claimed by applicant.

'286 does not disclose the viscosity of the wax emulsions used in its examples, but it would have been obvious to one of ordinary skill in the art to have optimized the viscosity through no more than routine experimentation because viscosity is known to be an important parameter to control in coatings.

'286 does not disclose the addition of dispersants or surfactants, but because the triglyceride may be applied as an emulsion or dispersion, it would have been conventional to add dispersants.

The stearic acid of claim 38 is present in the triglyceride of '286.

Dry particles of the triglyceride may be sprayed onto the substrate (3:1-19), which means that the composition is then 100% triglyceride, thereby meeting claim 41.

'286 does not describe recycling the fiber board or other fibrous vegetable materials, but because '286 is using the same triglyceride as applicant, the material is inherently dispersible in warm alkaline aqueous solution. Claims 30 and 45 do not require recycling, or even the

Art Unit: 1762

dispersing of the composition in a warm alkaline aqueous solution, only that the composition applied is ABLE TO BE DISPERSED in a warm alkaline aqueous solution.

b) Claims 30-38, 41-42, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/00815.

'815 teaches applying a coating containing a triglyceride such as tristearin or a hardened vegetable oil to a paperboard, in order to make the coated paperboard more water resistant (page 8) and more repulpable (p 6). Tristearin is a triglyceride with stearic acid. Additives such as beeswax, a type of paraffin (p 5), may also be present. The coating composition may be applied in the molten state (p 5), thus meeting the requirements of 100% of claim 41. It is disclosed that the triglycerides may be removed from the paperboard by several different means, including hot water (pp 6-7) and alkaline conditions.

'815 does not disclose the iodine value, MP or saponification value of the triglyceride, but because tristearin is one of the triglycerides claimed by applicant, a triglyceride with stearic acid, the tristearin of '815 would inherently have the same iodine value, MP and saponification value as that claimed by applicant. See the STN Registry file for RN 555-43-1 attached to the 8/3/2006 office action that shows experimental values of the melting point of tristearin (stearic triglyceride) to be 55 and 73 degrees C (131 and 163 F).

'815 does not disclose the viscosity of the wax emulsions used in its examples, but it would have been obvious to one of ordinary skill in the art to have optimized the viscosity

Art Unit: 1762

through no more than routine experimentation because viscosity is known to be an important parameter to control in coatings.

c) Claims 30-33, 41 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over RD 392017.

'017 teaches a waterproofing coating for paper that comprises mixtures of palmstearin with an iodine value of 12.7 or 38.2 (from 90:10 to 10:90), and a MP of 50-65 C (122-149 F) for the range of mixtures. One of the coatings used was palmstearin with an iodine value of 12.7 as 100% of the coating. The paper is easily recycled. See entire text.

'017 does not disclose the viscosity of the coatings used in its examples, but it would have been obvious to one of ordinary skill in the art to have optimized the viscosity through no more than routine experimentation because viscosity is known to be an important parameter to control in coatings.

'017 does not teach the recycling method, but it would have been obvious to one of ordinary skill in the art to have selected a conventional method such as a warm alkaline bath.

#### **(10) Response to Argument**

a) Sleeter (6001286)

Art Unit: 1762

The applicant has argued in the 7/31/2007 Appeal Brief that '286 does not teach the melting point, saponification number and viscosity. The examiner's position is as described in the above rejection – that both the applicant and '286 claim triglycerides from soy(bean) and palm that can be used in their respective processes (4:20-35 in '286 and Tables 1 and 2 in the present application), and thus the triglycerides of '286 would inherently have the same melting point and saponification number as the triglycerides of the applicant. Regarding the viscosity, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to have optimized viscosity through no more than routine experimentation because viscosity is known to be an important parameter to control in coatings.

The applicant has argued that '286 fails to recognize the recyclability of their composition. However, claims 30 and 45 do not require that recycling occur, or that even dispersion in a warm alkaline aqueous solution occur. The claims merely require that the composition BE ABLE TO BE DISPERSED in a warm alkaline aqueous solution. It is the examiner's position that because '286 is using the same triglycerides as the applicant, they would inherently be dispersible in a warm alkaline aqueous solution.

The applicant has argued that '286 teaches the composition for use on OSB, and cites the restriction requirement as part of the proof. The examiner disagrees that OSB is the only application. '286 also teaches fibrous vegetable materials (which would be inclusive of paper) and fiber board. Moreover, the examiner's position is that the restriction requirement would not be a proper place for a detailed study of the potential uses of the composition.



Art Unit: 1762

The applicant has argued that the application of dry particles (see claim 41) is merely an intermediate step. However, '286 teaches that the low IV material can be applied to a material prior to bonding of the material, and also afterwards to the edges of the substrate (3:8-19).

The applicant has argued that '286 teaches away from the present invention because of the statement in Example 3 that hydrogenating oils to 0 IV is expensive. It is the examiner's position that '286 does not teach away from the present invention, in that '286 teaches that for best performance that "the optimum IV is 0 or as low as possible" (4:60).

Regarding the Borsinger Declaration under 37 CFR 1.132 filed 5/18/2006: the declaration is insufficient to overcome the rejection of claims 30-39, 41-42, 45 and 47 based upon Sleeter (6011286). '286 teaches that his process may be used on "fibrous vegetable materials" (see Abstract) and the applicant has not demonstrated that all the materials used in '286 are products made of wood, as the applicant contends.

Art Unit: 1762

b) WO 96/00815

The applicant appears to believe that their claimed triglycerides are different from the tristearin of '815 (page 4), defined as a saturated tri-C18 triglyceride. However, the tristearin of '815 would inherently have the same iodine value, MP and saponification value as that claimed by applicant because applicant claims triglycerides with low iodine values (high degree of saturation). See the STN Registry file for RN 555-43-1 attached to the 8/3/2006 office action that shows experimental values of the melting point of tristearin (stearic triglyceride) to be 55 and 73 degrees C (131 and 163 F).

The applicant points to the use of tallow and plasticizer on page 15 for a repulping trial as teaching against the present invention. However, '815 also teaches the better recyclability of triglyceride-containing coatings in general (page 6). Moreover, claims 30 and 45 do not require that recycling occur, or that even dispersion in a warm alkaline aqueous solution occur. The claims merely require that the composition BE ABLE TO BE DISPERSED in a warm alkaline aqueous solution. It is the examiner's position that because '815 is using the same triglycerides as the applicant, they would inherently be dispersible in a warm alkaline aqueous solution.

c) RD 392017

The applicant has argued that '017 teaches away from the present invention, and that one would not want to use hydrogenated fats and oils in paper coatings. The examiner disagrees.

Art Unit: 1762

'017 shows a palmstearin triglyceride with an iodine value of 12.7, used at 100%; as one of its paper coatings.

The applicant has argued that there is no indication of the composition of the triglyceride in the reference. The examiner would point out that a palmstearin with iodine value of 12.7, used at 100%, is one of the paper coatings.

The applicant has argued that there is no indication of the viscosity of the coating. This is correct, but it is the examiner's position that it would have been obvious to one of ordinary skill in the art to have optimized viscosity through no more than routine experimentation because viscosity is known to be an important parameter to control in coatings.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Erma Cameron

  
**ERMA CAMERON**  
**PRIMARY EXAMINER**

Art Unit: 1762

Conferees:

Erma Cameron *Erma Cameron*  
ERMA CAMERON  
PRIMARY EXAMINER

/Jennifer Michener/

Quality Assurance Specialist, TC1700

Jennifer K. Michener

*[Signature]*  
Tim Meeks